UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the

Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): April 19, 2006

ATHEROS COMMUNICATIONS, INC.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction 0-50534 (Commission File Number) 77-0485570 (IRS Employer

of incorporation)

Identification No.)

5480 Great America Parkway, Santa Clara, California 95054

(Address of principal executive offices) (Zip Code)

Registrant s telephone number, including area code: (408) 773-5200

Not Applicable

(Former name or former address, if changed since last report)

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Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- " Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- " Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- " Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- " Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01. Entry into a Material Definitive Agreement.

On April 19, 2006, the Registrant s Board of Directors, based on the recommendation of the Compensation Committee, approved an amendment to the Registrant s 2004 Employee Stock Purchase Plan, to be effective May 4, 2006, such that the offering periods under the plan, which formerly consisted of overlapping 24-month periods, shall consist of consecutive six month periods commencing on May 5, 2006. The Amended and Restated 2004 Employee Stock Purchase Plan is attached to this current report on Form 8-K as Exhibit 10.1.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit Description

10.1 Amended and Restated 2004 Employee Stock Purchase Plan.

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SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: April 21, 2006

ATHEROS COMMUNICATIONS, INC.

By: /s/ Jack R. Lazar Name: Jack R. Lazar

Title: Vice President and Chief Financial Officer

EXHIBIT INDEX

Exhibit

DescriptionAmended and Restated 2004 Employee Stock Purchase Plan. 10.1